

ABSTRACT OF THE DISCLOSURE

An electric motor includes a housing and a circular stator. The housing has an inner circumferential surface. The housing also has a first predetermined thermal expansion coefficient. The housing further has an elastic part. The stator core is pressed to an inside of the housing by tight fit. The stator core has an outer circumferential surface. The stator core also has a second predetermined thermal expansion coefficient that is different from the first predetermined thermal expansion coefficient. A void is defined between the inner circumferential surface and the outer circumferential surface so as to prevent the inner and the outer circumferential surfaces from contacting each other in a circular region. When the housing and the stator core expand or shrink so as to tightly fit each other due to a differential between the first and second predetermined thermal expansion coefficients, the elastic part corresponding to the void is elastically deformed.

15